FOR INFORMATION DA-2008-29 July 11, 2008

SUBJECT: Detections of Panicle Rice Mite, Steneotarsonemus spinki, in Lajas, Puerto Rico

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

On July 11, 2008, the Animal and Plant Health Inspection Service (APHIS) issued a Federal Domestic Quarantine Order to prevent the movement of regulated articles from Puerto Rico to stop the spread of Panicle Rice Mite (PRM). Specifically, this Federal Order restricts the interstate movement of all *Oryzae* spp. plants or plant parts, including *O. sativa*, cultivated paddy rice, *O. latifolia* weedy red rice, and plants or plant parts of *Cyperus irea* originating from Puerto Rico. A copy of the Federal Order, which is effective immediately, is attached.

The 2008 National PRM Survey conducted by APHIS' Plant Protection and Quarantine program and the Puerto Rico Department of Agriculture (PRDA) confirmed the presence of PRM on May 20, 2008, during field sampling in Lajas. Detections were found at an educational facility, as well as a rice research center. Both facilities produce rice seed for research only, not consumption. APHIS notified PRDA of this confirmed detection and is currently conducting surveys to delimit the infestation.

This outbreak is considered to be present in the Commonwealth of Puerto Rico, but only in some areas where host crops are grown. Due to PRM's detection, interstate movement of regulated articles originating from Puerto Rico may only be allowed if: (1) the requirements of the Federal Order are met in full and (2) the owner or agent of the premises enters into a compliance agreement.

The PRM is considered a serious rice pest in China, Philippines, and Taiwan, where it has caused substantial crop losses. Yield losses can range from 30 to 90 percent. The recent PRM detection in Texas was confirmed on July 13, 2007. In 1997, the pest was detected in the Caribbean region where it is now known to affect Cuba, the Dominican Republic, and Haiti. In 2002, the mite was reported in Costa Rica and Nicaragua and, in 2005, in Colombia. Recent reports also indicate its presence in Mexico.

For additional details on the Federal response to the detection of PRM, you may contact Brian Kopper, Eastern Regional Program Manager, at Area Code (919) 855-7318 or Valerie DeFeo, National Program Coordinator, at Area Code (301) 734-3393.

/s/ Rebecca A. Bech

Rebecca A. Bech Deputy Administrator Plant Protection and Quarantine

Attachment: Federal Order

FEDERAL DOMESTIC QUARANTINE ORDER

Steneotarsonemus spinki (Panicle Rice Mite)
DA-2008-29

The purpose of this Federal Order is to prevent the spread of the plant pest Panicle Rice Mite (PRM), *Steneotarsonemus spinki*, through regulatory authority provided by Section 412(a) of the Plant Protection Act (PPA) of June 20, 2000, as amended, 7 U.S.C. 7712(a), which authorizes the Secretary of Agriculture to prohibit or restrict the movement in interstate commerce of any plant, plant part, or article if the Secretary determines that the prohibition or restriction is necessary to prevent the dissemination of a plant pest within the United States. Regulatory authority is also provided by Section 414 of the PPA, which authorizes the Secretary of Agriculture to hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of any plant, plant pest, plant product, article, or means of conveyance if the Secretary considers it necessary in order to prevent the dissemination of a plant pest that is new to or not known to be widely prevalent or distributed within and throughout the United States.

The Administrator of the Animal and Plant Health Inspection Service (APHIS) has determined that it is necessary to establish restrictions on the interstate movement of regulated articles from Puerto Rico as described in this Federal Order in order to prevent further pest dissemination of PRM. The 2008 National PRM Survey conducted by APHIS's Plant Protection and Quarantine and the Puerto Rico Department of Agriculture confirmed the presence of the PRM pest during field sampling. Due to this environmental detection, interstate movement of regulated articles originating from Puerto Rico may only be allowed if the requirements of this Federal Order are met in full and if the owner or agent of the premises enters into a compliance agreement as required by this Federal Order.

Therefore, in order to prevent the further spread of PRM, effective immediately, all *Oryzae* spp. plants or plant parts, including *O. sativa*, cultivated paddy rice and *O. latifolia* weedy red rice and plants or plant parts of *Cyperus irea* originating from Puerto Rico are restricted from moving interstate. Interstate movement will be permitted only if the following measures are put into place and are completely complied with prior to shipment.

A. Quarantined Areas:

The Administrator will list as a regulated area each State, or each portion of a State, in which an authorized APHIS official has confirmed PRM.

Less than an entire State will be designated as a quarantine area only if the Administrator determines that:

- 1) The State has adopted and is enforcing restrictions on the intrastate movement of the regulated articles that are substantially the same as those imposed by the Administrator on the interstate movement of regulated articles; and
- 2) The designation of less than the entire State as a quarantine area will be sufficient to prevent the interstate spread of PRM.

The Administrator may temporarily designate any non-quarantine area as a quarantine area. The Administrator will give a copy of this Order along with a written notice for the temporary designation to the owner or person in possession of the non-quarantine area. Thereafter, the interstate movement of any regulated article from an area temporarily designated as a quarantine area will be subject to this Order. As soon as practicable, this area will be added to the list of quarantine areas until such time that the Administrator determines the area is free of PRM and terminates the designation. The owner or person in possession of an area for which designation is terminated will be given notice of the termination as soon as practicable.

The Administrator has designated the entire Commonwealth of Puerto Rico as a quarantine area; and restrictions will be placed on the intrastate movement of the regulated articles to prevent the spread of PRM for all counties.

B. Determination of Infestation:

Any State or portion of a State in which any of the PRM life stages are found, including eggs, larvae, pupae, or adults will be considered infested and therefore designated a quarantined area.

C. Regulated Articles:

The following are regulated articles, and may not be moved interstate from a PRM quarantine area except in accordance with this Order:

1) All plants or plant parts of *Oryzae* spp., including *O. sativa*, cultivated paddy rice and *O. latifolia* weedy red rice, and all plants or plant parts of *Cyperus irea*.

2) Any other products, articles, or means of conveyance of any character whatsoever, when it is determined by an inspector that they present a hazard of spread of PRM.

D. Conditions for Interstate Movement of Regulated Articles:

All regulated articles must meet the conditions of this Federal Order for interstate movement to take place. This includes appropriate treatment to ensure that regulated articles are free from PRM prior to shipment, compliance agreement with facilities to facilitate requirements in accordance to movement, and/or certification to affirm requirements have been met.

An inspector or person operating under a compliance agreement will issue a certificate for the interstate movement of a regulated article if he/she determines that the regulated article has been grown, produced, handled, processed, stored, packaged or treated in a manner that, in the judgment of the inspector, prevents the regulated article from presenting a risk of spreading PRM. Treatments can include the following methods:

Treatment

Seed (rice for planting, for either production or research use):

a) Process the rice seed according to standard processing practices.

b) Treat seed (in individual, gas-permeable bags) by **ONE** of the following methods

1. Phosphine treatment:

Phosphine should be applied at a rate in the range of 750 to 2250 ppm/1000 ft³ (used as either the Aluminum or Magnesium forms of Phosphine applied in gas, liquid or tablet form) at the discretion of the Compliance Agreement holder and fumigator dependent on the leakage of the fumigation structure. Treatment concentration readings should not fall below the minimum 350 ppm/1000 ft³ over the 72 hours (readings should be taken at 24, 48, and 72 hrs to document treatment).

During fumigation, elevate the sacks of seed off of the floor level and place them on pallets in a single layer to facilitate even application of the fumigant.

2. Methyl bromide treatment:

Methyl bromide treatment should be applied when the seed's moisture content is between 14.2% and 8.9% ensuring a germination rate of between 93% and 92%, respectively (see Table 1 for higher temperature recommendations and rates).

During fumigation, elevate the sacks of seed off of the floor level and place them on pallets in a single layer to facilitate even application of the fumigant.

Table 1: Methyl Bromide Fumigation of Rice Seed in Accordance with the APHIS Steneotarsonemus spinki New Pest Response Guidelines

Steneotar softemus spitiki New Yest Response Guidennes				
		Minimum concentration readings (ounces) at:		
Temperature	Dosage rate	Duration	Seed	Germination
•	$(lb/1,000 ft^3)$		moisture %	%
50°F	5 lbs	12 hrs	17.0	9
50°F	5 lbs	12 hrs	14.2	93
50°F	5 lbs	12 hrs	8.9	92
51-65°F	4 lbs	12 hrs	17.0	27
51-65°F	4 lbs	12 hrs	14.2	95
51-65°F	4 lbs	12 hrs	8.9	94
≥80°F	1.25 lbs	12 hrs		80

3. Cold treatment:

Treat rice stems infested with live *S. spinki* at -8 ° C for a minimum of 72 hours. This treatment is feasible for small-scale seed treatment.

- c) Treated seed will be sampled to confirm that the chosen treatment killed S. spinki.
 - 1. Randomly take 10 50g sub-samples of treated seed to make up one approximately 500g composite sample.
 - 2. Three 50g sub-samples are drawn from this composite sample to confirm effectiveness of treatment to kill *S. spinki*.

Compliance Agreement

The owners of businesses in a designated quarantined area must enter into a compliance agreement with APHIS to facilitate the interstate movement of regulated articles in accordance with all of the requirements of this Federal Order and this specific subpart, subject to monitoring and audits by the State, Territory, Commonwealth, or APHIS regulatory official. Such persons must agree to handle, pack, process, treat, and move regulated articles in accordance with this Federal Order.

The compliance agreement described above may be cancelled orally or in writing by an inspector if the inspector finds that the person who entered into the compliance agreement has failed to comply with all of the requirements of this Federal Order. If the person is given notice of cancellation orally, written confirmation of the decision and the reasons for it must be provided as promptly as circumstances allow. If the compliance agreement is cancelled, the owner of the business designated as the quarantined area may appeal the decision in writing to the Administrator within 10 days after receiving the written notification. The appeal must state all of the facts and reasons upon which the person relies to show that the compliance agreement was wrongfully cancelled. The Administrator will grant or deny the appeal, in writing, stating the reasons for the decision, as promptly as circumstances allow. If there is a conflict as to any material fact, at the request of the person making the appeal, a hearing may be held to resolve the conflict. Rules of practice concerning the hearing will be adopted by the Administrator.

Certification

Certificates may be issued by an inspector for the interstate movement of all regulated articles from all quarantined areas, provided they meet the conditions specified in this Federal Order.

E. Definitions:

<u>Administrator</u>: The Administrator of the Animal and Plant Health Inspection Service or any individual authorized to act for the Administrator.

<u>Certificate:</u> An official document, stamp, or imprint by which an inspector affirms that a specified regulated article meets applicable requirements of this subpart and may be moved from a quarantine area into any area of the United States.

<u>Compliance agreement:</u> A written agreement between the Animal and Plant Health Inspection

Service and a person engaged in the business of growing or handling regulated articles for interstate movement, in which the person pledges to comply with this subpart.